

Requirements for Alternate Protein Products in the National School Lunch Program and School Breakfast Program

This guidance applies to the meal patterns for grades K-12 and preschoolers (ages 1-4) in the U.S. Department of Agriculture's (USDA) National School Lunch Program (NSLP), School Breakfast Program (SBP), Seamless Summer Option (SSO) of the NSLP, and Afterschool Snack Program (ASP) of the NSLP. For information on the meal pattern and crediting requirements for grades K-12, visit the Connecticut State Department of Education's (CSDE) [Meal Patterns for Grades K-12 in School Nutrition Programs](#) and [Crediting Foods in School Nutrition Programs](#) webpages. For information on the meal pattern and crediting requirements for preschoolers, visit the CSDE's [Meal Patterns for Preschoolers in School Nutrition Programs](#) webpage.

Quantities for the meat/meat alternates component are indicated as ounce equivalents in the NSLP meal pattern for grades K-12 and as ounces in the ASP meal pattern for grades K-12 and the NSLP and ASP preschool meal patterns. The amount that credits as 1 ounce equivalent or 1 ounce of meat/meat alternates is the same. This document refers to ounce equivalents for simplicity.



Alternate protein products (APPs) credit as the meat/meat alternates component in the meal patterns for school nutrition programs. APPs are food ingredients that may be used alone or in combination with meat, poultry, or seafood. They are processed from soy or other vegetable protein sources and may be dehydrated granules, particles, or flakes. Some examples include soy flours, soy concentrates, soy isolates, whey protein concentrate, whey protein isolates, and casein. APPs may be used in the dry (nonhydrated), partially hydrated, or fully hydrated form.

APPs are generally used as part of a formed meat patty or in a vegetarian patty resembling a meat product. Examples of foods that might contain added APPs include beef patties, beef crumbles, pizza topping, meat loaf, meat sauce, taco filling, burritos, and tuna salad. Processed food items such as vegetarian burgers may contain APP, but the food item itself is not an APP because it contains other ingredients such as seasonings or breading. APPs do not include tofu, surimi, seitan, or tempeh.



A 1-ounce serving of a creditable APP provides 1 ounce equivalent of the meat/meat alternates component.

Requirements for Alternate Protein Products in the NSLP and SBP

Criteria for APPs

APPs must meet the USDA's requirements specified in [appendix A](#) of the NSLP regulations (7 CFR 210) and [appendix A](#) of the SBP regulations (7 CFR 220). These regulations specify that APPs may credit for part or all the meat/meat alternates requirement only if they meet the three criteria below.

1. The APP must be processed so that some portion of the non-protein constituents of the food is removed. This refers to the manufacturing process for APP. APP must be safe and suitable edible products produced from plant or animal sources.
2. The biological quality of the protein in the APP must be at least 80 percent of casein (milk protein), determined by performing a Protein Digestibility Corrected Amino Acid Score (PDCAAS). The PDCAAS is a method of evaluating protein quality.
3. The APP contains at least 18 percent protein by weight when fully hydrated or formulated. "When hydrated or formulated" refers to a dry APP and the amount of water, fat, oil, colors, flavors, or any other substances that have been added.

Menu planners cannot determine if an APP product meets the three USDA criteria by reading the product's label. The labeling laws of the USDA's Food Safety Inspection Service (FSIS) and Food and Drug Administration (FDA) require manufacturers to list product ingredients, but percentage labeling is voluntary. For example, a product may list whey protein concentrate and hydrolyzed soy protein in the ingredients but will not indicate the percentage of these protein ingredients by weight. For more information, refer to the USDA's [Questions and Answers on Alternate Protein Products](#).

Required Documentation for APPs

SFAs must obtain documentation from the manufacturer that the product meets the APP criteria. Without appropriate documentation, APPs cannot credit in the school nutrition programs. Acceptable documentation includes any of the following:

- a Child Nutrition (CN) label;
- product formulation statement (PFS) from the manufacturer; or
- a signed letter from a company official attesting that the APP meets the USDA's requirements.

The manufacturer's documentation should include information on the percent protein contained in the dry alternate protein product and in the prepared product. For an APP product mix, manufacturers should provide information on the amount by weight of dry APP in the package, hydration instructions, and instructions on how to combine the mix with meat or other meat alternates.

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The USDA's *Questions and Answers on Alternate Protein Products (APP)* provides additional guidance on documenting the APP requirements. For information on CN labels and PFS forms, refer to the CSDE's *Product Formulation Statements* and *Child Nutrition (CN) Labeling Program*, and the USDA's *Tips for Evaluating a Manufacturer's Product Formulation Statement*.

Considerations for Reducing Choking Risks for Young Children

Children younger than 4 are at the highest risk of choking. Some foods that contain APPs may be choking hazards. Examples include tube-shaped meats like hotdogs, sausage, and meat sticks. Consider children's age and developmental readiness when deciding what types of APP foods to offer in school menus. For additional guidance, visit the "Choking Prevention" section of the CSDE's [Food Safety for Child Nutrition Programs](#) webpage.

Resources

Accepting Processed Product Documentation in the NSLP and SBP (CSDE):

https://portal.ct.gov/-/media/SDE/Nutrition/NSLP/Crediting/Accepting_Procressed_Product_Documentation_SNP.pdf

Afterschool Snack Program Handbook (CSDE):

https://portal.ct.gov/-/media/SDE/Nutrition/ASP/ASP_Handbook.pdf

Child Nutrition (CN) Labeling Program (CSDE):

https://portal.ct.gov/-/media/SDE/Nutrition/NSLP/Crediting/CN_Labeling_Program.pdf

Crediting Commercial Meat/Meat Alternate Products in the NSLP and SBP (CSDE):

https://portal.ct.gov/-/media/SDE/Nutrition/NSLP/Crediting/Credit_Commercial_MMA_SNP.pdf

Crediting Deli Meats in the NSLP and SBP (CSDE):

https://portal.ct.gov/-/media/SDE/Nutrition/NSLP/Crediting/Credit_Deli_SNP.pdf

Crediting Tofu and Tofu Products in the NSLP and SBP (CSDE):

https://portal.ct.gov/-/media/SDE/Nutrition/NSLP/Crediting/Credit_Tofu_SNP.pdf

Meal Patterns for Grades K-12 in School Nutrition Programs (CSDE webpage):

<https://portal.ct.gov/SDE/Nutrition/Meal-Patterns-School-Nutrition-Programs>

Meal Patterns for Preschoolers in School Nutrition Programs (CSDE webpage):

<https://portal.ct.gov/SDE/Nutrition/Meal-Patterns-Preschoolers-in-School-Nutrition-Programs/Documents>

Meat/Meat Alternates Component for Grades K-12 (CSDE webpage):

<https://portal.ct.gov/SDE/Nutrition/Crediting-Foods-in-School-Nutrition-Programs/Documents#MMA>

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Meat/Meat Alternates Component for Preschoolers (CSDE webpage):

<https://portal.ct.gov/SDE/Nutrition/Meal-Patterns-Preschoolers-in-School-Nutrition-Programs/Related-Resources#MMA>

Menu Planning Guide for Preschoolers in the NSLP and SBP (CSDE):

https://portal.ct.gov/-/media/SDE/Nutrition/NSLP/Preschool/Menu_Planning_Guide_Preschool.pdf

Menu Planning Guide for School Meals for Grades K-12 (CSDE):

<https://portal.ct.gov/SDE/Nutrition/Menu-Planning-Guide-for-School-Meals>

Product Formulation Statement (Product Analysis) for Meat/Meat Alternate (M/MA) Products in Child Nutrition Programs (USDA):

https://www.fns.usda.gov/sites/default/files/resource-files/PFS_Meats-Meat_Alternates_Fillable_508.pdf

Product Formulation Statements (CSDE):

https://portal.ct.gov/-/media/SDE/Nutrition/NSLP/Crediting/Product_Formulation_Statements.pdf

Questions and Answers on Alternate Protein Products (APP) (USDA):

<https://www.fns.usda.gov/questions-and-answers-alternate-protein-products-app>

Resources for the Preschool Meal Patterns (CSDE):

https://portal.ct.gov/-/media/SDE/Nutrition/NSLP/Preschool/Resources_Preschool_Meal_Patterns.pdf

Resources for the School Meal Patterns for Grades K-12 (CSDE):

https://portal.ct.gov/-/media/SDE/Nutrition/NSLP/MealPattern/Resources_School_Meal_Patterns_grades_K-12.pdf

Reviewer's Checklist for Evaluating Manufacturer Product Formulation Statements for Meat/Meat Alternates (USDA):

https://fns-prod.azureedge.us/sites/default/files/reviewer_checklist.pdf

Tips for Evaluating a Manufacturer's Product Formulation Statement (USDA):

<https://www.fns.usda.gov/sites/default/files/resource-files/manufacturerPFStipsheet.pdf>

Requirements for Alternate Protein Products in the NSLP and SBP



For more information, refer to the CSDE's guides, *Menu Planning Guide for School Meals for Grades K-12* and *Menu Planning Guide for Preschoolers in the NSLP and SBP*, or contact the [school nutrition programs staff](#) at the Connecticut State Department of Education, School Health, Nutrition and Family Services, 450 Columbus Boulevard, Suite 504, Hartford, CT 06103-1841.

This document is available at https://portal.ct.gov/-/media/SDE/Nutrition/NSLP/Crediting/APP_Requirements_SNP.pdf.

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1. **mail:** U.S. Department of Agriculture
Office of the Assistant Secretary for Civil Rights
1400 Independence Avenue, SW
Washington, D.C. 20250-9410; or
2. **fax:** (833) 256-1665 or (202) 690-7442; or
3. **email:** program.intake@usda.gov

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